

CERTAMEN MELASTOMATACEIS II.

John J. Wurdack

MICONIA SETOSA Wurdack, sp. nov.

Sect. Amblyarrhena. M. haematostemoni Naud. affinis sed pubescentia longiore inflorescentia compactiore filamentis eglandulosis stylo glabro differt.

Trichomata leavia. Ramuli teretes dense fusco-brunneos-setosi pilis erectis 2(-3) mm. longis. Petioli 2.5-3.5 cm. longi pubescentia ramorum eadem. Lamina tenuiter coriacea 7.5-9.5 x 3-5 cm. elliptica vel parce obovato-elliptica apice acuta basi late acuta 5-nervia (nervulis marginalibus neglectis) venis supra impressis subtus anguste elevatis, margine ciliata integra, supra glabra, subtus cum nervis primariis modice setulosis secundariis tertiarisque sparse setulosis superficie glabra. Inflorescentia compacto-paniculata rotundata ca. 5 cm. longa. Pedicelli setulosi 3-4 mm. longi dense setosi ad medium bibracteolati bracteolis 3-3.5 x 0.5 mm. supra glabris subtus setulosis. Flores 5-meri. Hypanthium (ad torum) 3 x 4 mm. dense setosum; tubus calycis 1.5 mm. longus lobis 1.2-1.5 mm. longis apice rotundatis extus tuberculatis tuberculo quam lobus interior brevior. Petala glabra 7-7.2 x 6.2-6.8 mm. suborbicularia apice involuta. Filamenta 3 x 0.8-0.9 mm. glabra; antherae 1.7 mm. longae oblongae apice minute uniporosae connectivo sub thecis antice 0.2-0.3 mm. prolongo bilobulato. Stylus 5-5.5 x 0.8-0.9 mm. glaber; stigma punctiforme. Ovarium 5-loculare apice in collo sulcato glabro 1.5 mm. alto circum stylum prolongum.

Holotype: Silvio Yepes Agredo 458 (CNHM 1304596) (F), collected between El Tambo and Munchique, Dept. Cauca, Colombia, Aug. 1948. "Mata."

M. haematostemon has generally shorter caudine, foliar, and hypanthial pubescence, prominent exterior calyx teeth exceeding the interior lobes, larger anthers with glandular filaments, and a puberulent style.

MICONIA ACANTHOCORYNE Wurdack, sp. nov.

Sect. Cremanium. M. miocarpae Naud. affinis sed cum petiolis brevioribus foliis late ellipticis floribus minoribus sessilibus stylo staminibus breviorie.

Rami supremi teretes cum petiolis paniculisque rubiginoso-furfuracei. Petioli 1-2 cm. longi; lamina coriacea integra 8-12.5 (acumine non inclusu) x 4-7 cm. elliptica apice caudato-acuminata basi obtusa trinervia (nervulis marginalibus exclusis) nervis primariis et secundariis supra anguste impressis subtus leviter elevatis vix reticulatis, supra glabra, subtus modice rubiginoso-furfuracea pilis spiculatis ad paginam 10-12/mm.² praecipue apicem versus. Panicula 8-13 cm. longa ramis interrumpo-confertifloris; flores 5-meri sessiles vel rare vix (ad

0.5 mm.) pedicellati bracteolis ovato-lanceolatis 1-2.5 mm. longis valde caducis extus furfuraceis. Hypanthium (ad torum) 0.9-1.1 x 1.2 mm. minutissime glandulosum apice medioque glabrum basi sparse furfuraceum; tubus calycis 0.1 mm. altus, lobis interioribus inconspicuis 0.15 mm. altis lateribus concavis, exterioribus callosis interiores aequantibus. Petala 1 x 0.8 mm. obovata apice rotundato-truncata glabra. Filamenta 7 mm. longa; antherae 2.2 mm. longae oblongae late 4-porosae 4-loculares connectivo 0.5 mm. prolongato postice vix incrassato. Stylus 2 x 0.25 mm. glaber; stigma subcapitellatum 0.4 mm. latum. Ovarium biloculare multiovulatum apice vix conicum glabrum.

Holotype: Kjell von Snieidern 5364 (CNHM 1298984) (F; isotype CNHM 1296133 F), collected at "La Selva. Cordillera Occidental. Vertiente Occidental.", Dept. Caldas, Colombia, elev. 1600-1900 m., 1-2-1946.

M. miocarpa has petioles 2-4 cm., leaf blade (exclusive of acumen) length/width ratio 2.6-3 (rather than 1.8-2.2), flowers 0.5-1 mm. pedicellate, hypanthium plus calyx 1.5-1.8 mm. long and densely furfuraceous, and style a little longer than the stamens. The lower leaf surface pubescence of M. miocarpa is not mentioned directly by Naudin and is not visible in the excellent photograph of the holotype (F36267) but, by implication and from Cogniaux's placement in his Monograph, is slight and limited to the veins. No mature leaf-tips are present in von Snieidern 5364 but the acumens of young leaves are about 1/8-1/5 the length of the blade proper. The specific name, suggested by Dr. D. P. Rogers, refers to the hairs of the lower leaf surface.

MICONIA AENIGMATICA Wurdack, sp. nov.

Sect. Cremanium. M. lehmannii Cogn., M. tinifoliae Naud., et M. nodosae Cogn. remote affinis sed cum floribus multo maioribus.

Rami quadrangulato-teretes junioribus leviter furfuraceis mox glabrescentis. Petioli 1-3 cm.; lamina 10-15 x 4-7.5 cm. obovato-elliptica vel elliptica apice breviter subabrupteque (4-10 mm.) hebeti-acuminata basi acuta brevissime (2-4 mm.) 5- plinervia nervis duobus interioribus altius (2-5 mm.) inaequaliterque insertis cum nervo mediano sensim coalitis nervis lateribus 3-7 mm. inter se distantibus supra levissime impressis subtus prominentibus, primum ubique fulvo-furfuracea supra mox glabrescentia subtus sparsissime furfuracea (deum glabrescentia?), margine inconspicue remoteque (2-4 mm.) spinuloso-denticulata spinulis 0.2 mm. longis valde caducis. Panicula ampla 10-15 cm. longa glabra; flores 5-meri brevissime (0.5-1 mm.) crasso-pedicellati. Hypanthium (ad torum) 4 x 3.5 mm. glabrum; tubus calycis 0.7 mm. longus lobis obtusis 0.5 mm. altis extus calcaratis calcari acuto lobis parce breviore. Petala 2.2 x 2.3-2.4 mm. obovata apice oblique rotundato-truncata intus et extus granulosa. Filamenta 2.3-2.5 mm. longa glabra; antherae glabrae obovato-oblongae apice biporosae (poris pro sectione Cremanio

parvis) apice biloculares basim versus 4-loculares loculis 1.7-1.9 mm. longis connectivo sub loculis antice 0.7 mm. bilobulato-prolongato postice 1-1.1 mm. longo calcarato. Stylus 6-7 x 0.6 mm. glaber; stigma vix capitellatum 0.7-0.8 mm. latum. Ovarium 3-loculare multiovulatum apice libero conico cum collo glabro 0.8 mm. alto.

Holotype: J. Cuatrecasas 21752 (CNHM 1300629) (F; isotypes NY, CNHM 1300628 F), collected on the "Cordillera Occidental, Los Farallones, vert. NW, Quebrada del Raton: Mina El Diamante", Dept. El Valle, Colombia, elev. 2950-3000 m., 29-30 July 1946. "Arbol 8 met. Hoja membranoso coriacea, verde brillante haz, verde claro enves. Caliz verde palido. Petalos blancos. Filamentas y anteras blancos."

Paratypes: Cuatrecasas 21701 (CNHM 1300630 F, NY), from "Cordillera Occidental, Los Farallones, vertiente oriental: Almorzadero, bosques", Dept. El Valle, elev. 2950 m., 25 July 1946.

Among the glabrescent species of Sect. Cremanium, there are none with the foliar and large flower characters of M. aenigmatica, the three postulated relatives having flowers less than one-half this size. M. tinifolia and M. lehmannii have proportionately wider-pored anthers; the lateral veins of the leaves of M. tinifolia are scarcely more prominent than the tertiaries and not at all elevated. M. nodosa, from the description and type photograph, differs in its setulose leaf nodes and callose petiole insertion as well as in flower size. The general aspect of M. aenigmatica is reminiscent of Sect. Amblyarrhena where the anthers are usually unappendaged and uniporous.

MICONIA RAVA Wurdack, sp. nov.

Sect. Cremanium. M. orcheotomae Naud., M. plethoricae Naud., et M. plena Gleas. affinis sed cum ramis vetustioribus 4-alatis.

Rami acute quadrangulati (vetustiores breviter crasseque 4-alati) dense fulvo-furfuracea pilis stellatis. Petioli 2-3 cm. longi pubescentia ramorum eadem; lamina tenue coriacea 12-16 x 3.5-5 cm. integra vel levissime spinulosa elliptica vel levissime obovato-elliptica vel levissime ovato-elliptica apice breviter graditer acuteque acuminata basi acuta 5-nervia (nervis marginalibus inclusis) nervis primariis supra planis vel leviter sulcatis subtus elevatis, lateralibus supra obscuris subtus leviter elevatis 2-4 mm. inter se distantibus obscure reticulatis, supra primum fulvo-furfuracea mox glabrescentia subtus dense persistenterque fulvostellato-furfuracea. Panicula 5-14 cm. longa fulvo-furfuracea ramis confertifloris; flores sessiles ebracteolati 5-meri. Hypanthium (ad torum) 1.5-1.7 x 2-2.4 mm. dense fulvo-furfuraceum; tubus calycis 0.2 mm. altus lobis interioribus 0.4 mm. altis ovato-rotundatis exterioribus planis quam interioribus brevioribus. Petala 1.5 x 1.6 mm. obovata apice rotundata glabra. Filamenta 2.7-2.9 mm. glabra; antherae 1.2 x 0.7 mm. oblongae vel obovato-oblongae late biporosae ad partem 2/3 4-loculares connectivo sub loculis antice 0.3 mm. bilobulato-

prolongato postice 0.45 mm. hebeti-calcarato. Stylus 2.7 x 0.4 mm. glaber; stigma leviter capitellatum 0.6 mm. latum. Ovarium glabrum 3-loculare loculis multiovulatis apice conicum.

Holotype: J. Cuatrecasas 21705 (NY; isotypes CNHM 1300632 and 1300633 F), collected on the "Cordillera Occidental, Los Farallones, vertiente oriental: Almorzadero, bosques," Dept. El Valle, Colombia, elev. 2950 m., 25 July 1946. "Arbol. Hoja membranosa, rigida, gruesa, verde plomizo haz, ocrea enves. Petalos y estambres blancos. Caliz ocreo claro."

M. orcheotoma has smaller relatively broader leaves and terete to inconspicuously rounded-quadrangular branches, but similar flowers; *M. plena* has much more closely appressed pubescence, more widely spaced lateral veins on the leaves, acutely quadrangular but unwinged older branches, a truncate style, and unappendaged anthers; *M. plethorica* has shaggier stem pubescence, rounded-quadrangular branches dilated at the nodes, and relatively wider leaves.

MICONIA SUPERPOSITA Wurdack, sp. nov.

Sect. *Chaenopleura*. A *M. andinae* Naud. differt foliis tenuioribus inflorescentia minore floribus 5-meris antheris prorsus ad basin rimosis; a *M. hymenantherae* Tr. differt ramis foliisque glabris stigmata capitellata.

Rami tetragoni novellis squamulosis mox glaberrimis. Petioli 10-15 mm. longi; lamina 5.5-8 x 2.5-3.5 cm. oblongo-elliptica apice breviter acuminata basi late acuta margine inconspicue setuloso-denticulata (setulis 0.5 mm. longis 2-3 mm. inter se distantibus) trinervia (nervis marginalibus dilutis neglectis) nervulis supra creberrime impressis subtus vix elevatis laxe reticulatis, primum squamulosa mox glaberrima. Inflorescentia pauciflora; pedicelli 3-5 mm. longi supra medium bibracteolati bracteolis 3.7 x 0.8 mm. oblongo-lanceolatis; flores 5-meri ubique glabri. Hypanthium (ad torum) 2.5 x 3 mm. hemisphaericum; tubus calycis 0.5 mm. altus lobis interioribus 1 x 2 mm. apice rotundatis, exterioribus paulo brevioribus acutis vix elevatis. Petala 3-3.5 x 3.2-3.5 mm. orbicularia. Filamenta 4 mm. longa; antherae 1 mm. longae oblongae prorsus rimosae 4-loculares loculis semi-superpositis connectivo sub loculis antice 0.5 mm. producto bilobulato postice hebeti-unilobulato lobulo 0.5 x 0.8 mm. Stylus 3-3.5 x 0.4 mm.; stigma capitellatum 0.8 mm. latum. Ovarium 3-loculare apice late conicum.

Holotype: J. Cuatrecasas 23324 (NY; isotype CNHM 1300537 F), collected in "Cordillera Central, vertiente occidental; Hoya del rio Otun, arriba de Penas Blancas," Dept. Caldas, Colombia, elev. 3000 m., 27 Nov. 1946. "Frutex ramoso divaricado bejucoso. Hoja verde brillante haz. Caliz verde claro. Petalos blancos. Fruto rojizo 7 mm."

M. andina has thicker leaves, larger 4-merous flowers, and anthers only slightly rimose. *M. hymenanthera* has crisped-hispidulous branches which are less acutely 4-angled, sparsely strigulose or hispidulous leaves, and a "clavate" style. The

anthers of M. superposita correspond closest to the description of those of M. hymenanthera. The anther loculi of M. superposita appear partially superposed, the dorsal loculus of each theca overlapping but distal to the ventral one.

Recently, through the courtesy of Dr. Lasser, I was able to examine the specimens, collected in Venezuela and deposited in the Caracas Herbarium, upon which Pittier based some validly published species and some nomina nuda; the latter were published in the Catalogo de la Flora Venezolana II (1947).

MACAIREA SESSILIFOLIA Pittier, a nomen nudum based upon Cardona 435 and Cardona 779, is Graffenreida sessilifolia Tr.

TIBOUCHINA CATHERINAE Pittier is a robust relative of T. striphnocalyx (DC.) Gleas. The differences are all quantitative but lend very different aspects to the two species. The Sipapo species may be distinguished by its much larger floral bracts and flowers, with denser hypanthial pubescence; the leaves also tend to be relatively larger and broader, with length/width ratio usually 3-3.5 rather than 2.2-2.8. T. catherinæ is represented, apart from the type collections, by Maguire & Politi 27600, 27820, 28263, 28463, and 28694, all from Cerro Sipapo.

TIBOUCHINA BRACHYANTHERA Pittier is T. aspera Aubl. var. asperrima Cogn. The pubescence of Jahn 755 is somewhat less spreading and dense than in typical var. asperrima, thus tending slightly toward var. aspera. The flower dissected by Pittier and all visible open flowers on the holotype have the anther tips destroyed by insects, which may have misled Pittier to his specific epithet. Examination of a bud showed normal attenuate anther tips; the anther size and the calyx, bract, and petal characters all are well within the species variability.

COMOLIA ANOMALA Pittier is Aoisanthera punctatissima (DC.) Triana.

MICONIA SETIMARGINATA Pittier is Tococa oligantha Gleason, a variable species widespread in the Pacaraima cumbres of Terr. Amazonas.

CLIDEMIA STELLULATA Pittier, a nomen nudum based on Williams 15400, is Miconia campestris (Benth.) Triana. In the description of Miconia heterotricha Wurdack, the relation with Heterotrichum of the small species group including this species and M. campestris was discussed. The relation of these Miconias with Clidemia umbonata DC. should also be noted. Generic adjustment of these various species is postponed until the various species of Clidemia can be studied further.